

Name _____



Hands-On Activity

Explore online.

Measuring Weather with Tools

Materials



How does the weather change over time?

Step 1



Use the weather tools to measure the weather every day for two weeks.

Step 2



Record your weather measurements on the weather chart each day.

© Houghton Mifflin Harcourt

Hands-On Activity Small Groups 20–30 min

Measuring Weather with Tools

3D Learning Objective

SEP Scientific Knowledge Is Based on Empirical Evidence

Children collect weather data and describe patterns when making observations.

Suggested Materials A weather chart, rain gauge, thermometer and windsack. Use a wide cloth sack or a cornucopia-shaped paper kite if a windsack is not available.

Preparation

You may also choose to complete this activity as a whole group, with individuals observing and recording the weather on different days. Prepare and post a chart for two weeks of weather data. Place the weather tools in an unobstructed area accessible to children.

Activity

STEP 1 Have children work in pairs to read and record the weather data. If children disagree on the data, suggest they cite evidence to support their observations. Have children make notes or drawings of their measurements to transfer to the chart.

STEP 2 Monitor children as they write the measurements in the chart. Suggest they refer to their notes. **Ask: Why is it important that our measurements are accurate? The measurements are the evidence that we will use to support claims we make. If the measurements are not accurate, we will not be able to support the claims.**

Hands-On Activity, continued

STEP 3 Children should analyze their results by first making their final observations. Then children should look for multiple sets of three or more days with similar weather, such as cloudy, cloudy, cloudy and rainy.

SEP Analyzing and Interpreting Data

Children should understand that weather changes from day to day but that over time, patterns are noticeable. Have children use their observations to describe a weather pattern. **Ask: How will you know when you see a weather pattern?** **We will find three or more days of weather that repeats.** **Ask: What is an example of a pattern in our data?** **Answers will depend on the specific weather conditions.**

Claims, Evidence, and Reasoning

Children should make a claim that weather changes form a pattern over time. They should cite evidence that specific changes in the weather, such as rainy, rainy, sunny, repeat. **Ask: How can you use a weather pattern as evidence to support a claim about tomorrow’s weather?** **A weather pattern shows past weather, which can be used to predict future weather.**

Scoring Rubric for Hands-On Activity	
3	States a claim supported with evidence that weather changes form a pattern
2	States a claim somewhat supported with evidence that weather changes form a pattern
1	States a claim that is not supported by evidence
0	Does not state a claim and does not provide evidence

Step 3



Tell about the weather patterns you observed. Make predictions for the next three days.

Make a claim.

Sample answer: The weather has shown a rainy, cloudy, or other kind of pattern.

What is your evidence?

Check children’s drawings for patterns illustrated with weather symbols for rainy, sunny, cloudy, stormy, windy, or snowy.